

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Addiese: COMMISSIONER FOR PATENTS P O Box 1450 Alexandra, Virginia 22313-1450 www.wepto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/537,142	11/10/2005	Richard Joseph Fagan	C&R-102	C&R-102 1704		
23557 SALIWANCH	7590 06/26/200 IIK LLOYD & SALIW.	EXAM	EXAMINER			
A PROFESSIO	ONAL ASSOCIATION	SAOUD, CI	SAOUD, CHRISTINE J			
PO BOX 1429 GAINESVILL	50 .E, FL 32614-2950	ART UNIT	PAPER NUMBER			
			1647			
			MAIL DATE	DELIVERY MODE		
			06/26/2008	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/537 142 FAGAN ET AL. Office Action Summary Examiner Art Unit Christine J. Saoud 1647 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 05 May 2008. 2a) ☐ This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 66-83 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 66. 71-75 and 80-83 is/are rejected. 7) Claim(s) 67-70 and 76-79 is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date 10/3/06

Notice of Draftsperson's Patent Drawing Review (PTO-948)
 Information Disclosure Statement(s) (PTO/S5/08)

Attachment(s)

Interview Summary (PTO-413)
 Paper No(s)/Mail Date.

6) Other:

Notice of Informal Patent Application

Art Unit: 1647

DETAILED ACTION

Applicant's amendment filed 05 May 2008 has been received and entered. Claims 46-65 have been cancelled and claims 66-83 have been added. Applicant mistakenly identified claims 67-83 as having been added.

Election/Restrictions

Applicant's election without traverse of Group I, corresponding to claims 46 and 65 in the reply filed on 05 May 2008 is acknowledged.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Art Unit: 1647

The information disclosure statement (IDS) submitted on 03 October 2006 is in compliance with the provisions of 37 CFR 1.97 and has been considered by the examiner.

Drawings

The Drawings filed 02 June 2005 are acceptable.

Specification

The disclosure is objected to because of the following informalities: the table in the specification at page 56 includes nucleic acid sequences which do not have corresponding Sequence identifiers. 37 CFR 1.821 (d) requires

Where the description or claims of a patent application discuss a sequence that is set forth in the "Sequence Listing" in accordance with paragraph (c) of this section, reference must be made to the sequence by use of the sequence identifier, preceded by "SEQ ID NO:" in the text of the description or claims, even if the sequence is also embedded in the text of the description or claims of the patent application.

Appropriate correction is required.

in the table

If the nucleic acids in this table are not currently found in the Sequence Listing,

Applicant will need to provide a new Sequence Listing (paper and computer copies) as

well as a statement indicating that the two are the same and include no new matter.

The sequences appear to be contained in the Sequence listing filed 10 November 2005,

however, the specification still needs to be amended to include the Sequence identifiers

Art Unit: 1647

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filled in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filled in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filled in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 66, 71, 73, 75, 80 and 82 are rejected under 35 U.S.C. 102(e) as being anticipated by US Pat. No. 6.914.046 (Hirsch et al.).

The instant claims are directed to isolated polypeptides and compositions thereof wherein the polypeptide has greater than 90%/95% sequence identity to SEQ ID NO:8 and wherein the polypeptide has "an activity of human growth hormone". Hirsch et al. teach a protein which has 94.6% amino acid sequence identity to SEQ ID NO:8 of the instant application. The protein of Hirsch et al. would have at least immunogenic activity of human growth hormone based on the large regions of amino acid sequence identity.

It is noted that the calculated % identity is only 94.6%, which is not "greater than 95% sequence identity". However, different algorithms used to calculate sequence identity are available and a slightly less conservative algorithm would provide a % identity that would be greater than 95% and meet the limitations of the instant claims. Therefore, the instant claims are anticipated by the prior art of Hirsch et al. absent evidence to the contrary.

Application/Control Number: 10/537,142
Art Unit: 1647

```
Sequence ID NO:8 compared to SEO ID NO:2 of Hirsch et al.
                        94.6%: Score 976.5: DB 2: Length 202:
 Ouerv Match
 Best Local Similarity 95.5%; Pred. No. 2.3e-100;
 Matches 193; Conservative 0; Mismatches 6; Indels 3; Gaps 1;
Qy
           1 MATGSRTSLLLAFGLLCLPWLQEGSAFPTIPLSRLFDNAMLRAHRLHQLAFDTYQEF--- 57
Db
           1 MATGSRTSLLLAFGLLCLPWLOEGSAFPTIPLSRLFDNASLRAHRLHOLAFDTYOEFNPO 60
Οv
          58 VSSWGMESIPTPSNREETOOKSNLELLRISLLLIOSWLEPVOFLRSVFANSLVYGASDSN 117
          61 TSLCFSESIPTPSNREBTOOKSNLELLRISLLLIOSWLEPVOFLRSVFANSLVYGASDSN 120
Db
         118 VYDLLKDLEEGIOTLMGRLEDGSPRTGOIFKOTYSKFDTNSHNDDALLKNYGLLYCFRKD 177
Qу
         121 VYDLLKDLEEGIOTLMGRLEDGSPRTGOIFKOTYSKFDTNSHNDDALLKNYGLLYCFRKD 180
Db
         178 MDKVETFLRIVOCRSVEGSCGF 199
QУ
Dh
         181 MDKVETFLRIVOCRSVEGSCGF 202
```

Claims 66, 72, 74, 75, 81 and 82 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat. No. 6,013,773 (Kobayashi et al.).

The instant claims are directed to isolated polypeptides and compositions thereof wherein the polypeptide has greater than 90%/95% sequence identity to SEQ ID NO:10 and wherein the polypeptide has "an activity of human growth hormone". Kobayashi et al. teach a protein which has 94.5% amino acid sequence identity to SEQ ID NO:10 of

Art Unit: 1647

176

the instant application. The protein of Kobayashi et al. would have at least immunogenic activity of human growth hormone based on the large regions of amino acid sequence identity.

It is noted that the calculated % identity is only 94.5%, which is not "greater than 95% sequence identity". However, different algorithms used to calculate sequence identity are available and a slightly less conservative algorithm would provide a % identity that would be greater than 95% and meet the limitations of the instant claims. Therefore, the instant claims are anticipated by the prior art of Kobayashi et al. absent evidence to the contrary.

Sequence ID NO.10 compared to SEO ID NO.1 of Vobayachi et al

Sequence ID NO:10 compared to SEQ ID NO:1 of Kobayashi et al.									
Query Match		94.5%;	Score 849.5;	DB 2; I	Length 176	;			
Best Loc	al Similarity	95.5%;	Pred. No. 1.2	2e-88;					
Matches	168; Conserva	tive 0	; Mismatches	5;]	Indels	3; Gaps	1;		
Qy	1 FPTIPLSRLFI	NAMLRAHRL	HQLAFDTYQEF	-VSSWGMES	SIPTPSNREE	TQQKSNLEL	57		
		ШШШ		1 1	шшш	ШШШ			
Db	1 FPTIPLSRLFI	NAMLRAHRL	HQLAFDTYQEFNI	POTSLCFSES	SIPTPSNREE	TQQKSNLEL	60		
Qy	58 LRISLLLIQSW	LEPVQFLRS	VFANSLVYGASDS	SNVYDLLKDI	LEEGIQTLMG	RLEDGSPRT	117		
	1111111111	ШШШ	111111111111111111111111111111111111111	ШШШШ	шшшш	ШШШШ			
Db	61 LRISLLLIQSW	LEPVQFLRS	VFANSLVYGASDS	SNVYDLLKDI	LEEGIQTLMG	RLEDGSPRT	120		
Qy :	118 GQIFKQTYSKI	DTNSHNDDA	LLKNYGLLYCFRE	OMDKVETFI	LRIVQCRSVE	GSCGF 173			
	1111111111	111111111111111111111111111111111111	111111111111111111111111111111111111111	ШШШ	ШШШ	ШШ			
Db	121 GQIFF	KQTYSKFDTN	SHNDDALLKNYGI	LYCFRKDMI	OKVETFLRIV	QCRSVEGSC	F		

Application/Control Number: 10/537,142 Page 7

Art Unit: 1647

Allowable Subject Matter

Claims 67-70 and 76-79 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine J. Saoud whose telephone number is 571-272-0891. The examiner can normally be reached on Monday-Friday, 6AM-2PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Manjunath Rao can be reached on 571-272-0939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 1647

/Christine J Saoud/ Primary Examiner, Art Unit 1647
